

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-022097**Date Inspected:** 22-Mar-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Li Yang and Zhu Zhong Hai**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG Trial Assembly**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector Mr. S. Manjunath Math was present during the time noted above for observations relative to the work being performed.

This QA Inspector randomly observed the following work in progress:

Orthotropic Box Girder (OBG) at Trial Assembly Areas

Segment 12BW (Visual Inspection)

This QA Inspector performed Visual Inspection (VT) for the items listed in the outstanding work (Punch List) after repair/rectification work by ZPMC, during the course of Inspection Mr. Zhang Qiang (ZPMC QC) and Mr. Wei Jian Bo (ABF QA) were present. VT inspection was performed for the following Items numbers (as mentioned in Punch List).

Item No. 168.

Item No. 169.

Item No. 170.

Item No. 171.

Item No. 172.

Item No. 173.

Item No. 174.

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Item No. 175.
Item No. 176.
Item No. 177.
Item No. 178.
Item No. 179.
Item No. 180.
Item No. 181.
Item No. 182.
Item No. 183.
Item No. 184.
Item No. 185.
Item No. 186.
Item No. 187.
Item No. 188.
Item No. 189.
Item No. 190.
Item No. 191.
Item No. 192.
Item No. 341.
Item No. 348.
Item No. 350.
Item No. 352.
Item No. 359.

The report duly signed by ZPMC QC, ABF QA and Caltrans QA Inspector was submitted to the Caltrans Lead Inspector Mr. Mark Miller and Mr. Art Peterson for review and disposition.

Segment 12BW to Segment 12CW (Longitudinal Diaphragm)

This QA Inspector observed the repair welding by Shielded Metal Arc Welding (SMAW) process on a Complete Joint Penetration (CJP) weld. The welder identification was 041713 and was observed welding in the 2G (Horizontal), 3G (Vertical) and 4G (Overhead) position using approved Welding Procedure Specification WPS-345-SMAW-2G(2F)-Repair-FCM-1, WPS-345-SMAW-3G(3F)-Repair-FCM-1 and WPS-345-SMAW-4G(4F)-Repair-FCM-1. The piece mark was identified as base material repair on at full height diaphragm at work point (W4).

Please reference the pictures attached for more comprehensive details.

Segment 12AW (Connection Clip)

This QA Inspector observed the in-process welding by Shielded Metal Arc Welding (SMAW) process on a Fillet weld. The weld joint was designated as Seg3004E-040/041. The welder identification was 070432 and was observed welding in the 2F (Horizontal) position using approved Welding Procedure Specification WPS-B-P-2212-FCM-1. The piece mark was identified as weld connecting Connection Clip on top of Bottom

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Panel T-Rib to the Floor Beam near work point (W4) at Panel Point (PP) 111.

Please reference the pictures attached for more comprehensive details.

Segment 12AW (Connection Clip)

This QA Inspector observed the in-process welding by Shielded Metal Arc Welding (SMAW) process on a Fillet weld. The weld joint was designated as Seg3004E-271. The welder identification was 070432 and was observed welding in the 2F (Horizontal) and 3F (Vertical) position using approved Welding Procedure Specification WPS-B-P-2212-FCM-1 and WPS-B-P-2213-FCM-1. The piece mark was identified as weld connecting Connection Clip on top of Bottom Panel T-Rib to the Floor Beam near work point (W4) at PP 111.

Please reference the pictures attached for more comprehensive details.

Segment 13AW (FL3 Floor Beam to Side Panel, Cross Beam side)

This QA Inspector observed the in-process welding by Shielded Metal Arc Welding (SMAW) process on a Complete Joint Penetration (CJP) groove weld. The Weld joint was designated as Seg3013AD-016. The welder identification was 067572 and observed welding in the 4G (Overhead) position using approved Welding Procedure Specification WPS-B-P-2214-B-U2-FCM-1. The piece mark was identified as weld connecting the FL3 Floor Beam to Side Panel, Cross Beam side at PP 119.

Please reference the pictures attached for more comprehensive details.

Segment 12BW (Cantilever Bracket)

This QA Inspector observed the in-process welding by Shielded Metal Arc Welding (SMAW) process on a Complete Joint Penetration (CJP) weld. The weld joint was designated as OBW12C-017. The welder identification was 046709 and was observed welding in the 4G (Overhead) position using approved Welding Procedure Specification WPS-B-P-2214-Tc-U4b-FCM-1. The piece mark was identified as Cantilever Brackets welded at Edge Panel at PP 113.5, Cross Beam side.

Please reference the pictures attached for more comprehensive details.

Segment 12CW (Cantilever Bracket)

This QA Inspector observed the in-process welding by Shielded Metal Arc Welding (SMAW) process on a Complete Joint Penetration (CJP) weld. The weld joint was designated as OBW12C-026. The welder identification was 041713 and was observed welding in the 4G (Overhead) position using approved Welding Procedure Specification WPS-B-P-2214-Tc-U4b-FCM-1. The piece mark was identified as Cantilever Brackets welded at Edge Panel at PP 116.5, Cross Beam side.

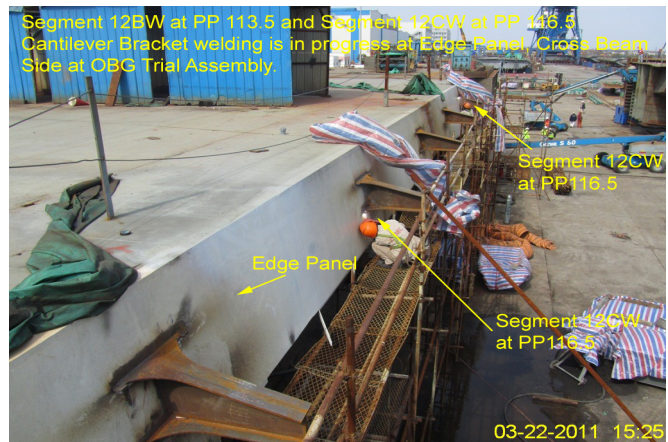
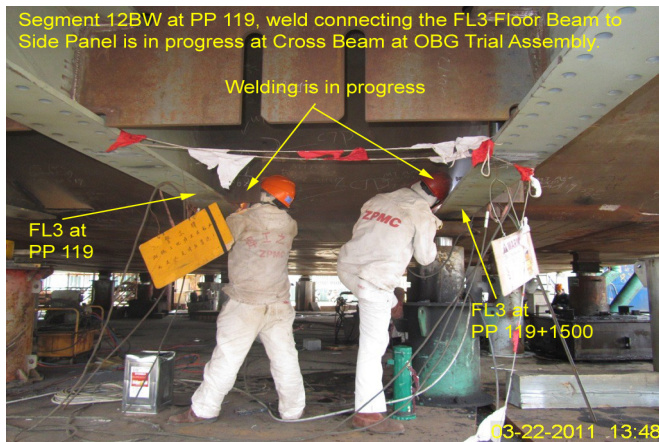
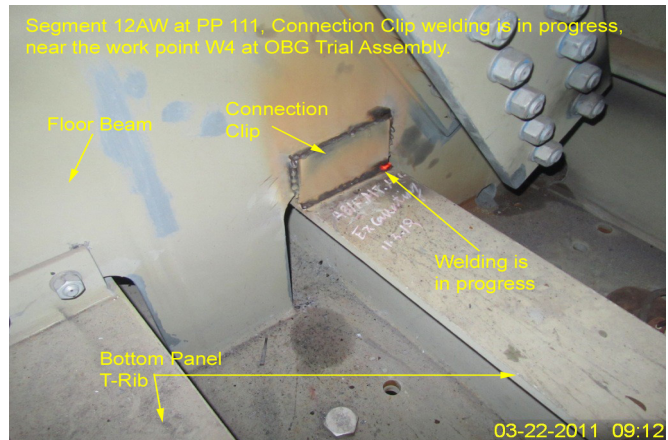
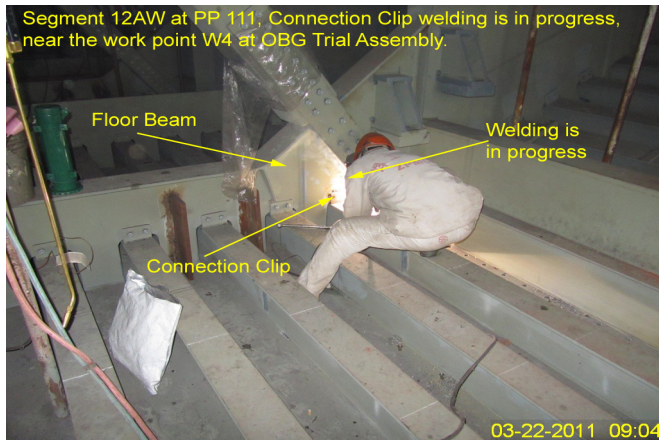
Please reference the pictures attached for more comprehensive details.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract

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documents.



Summary of Conversations:

No relevant conversations were reported on this date.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 15000422372, who represents the Office of Structural Materials for your project.

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Inspected By:	Math,Manjunath	Quality Assurance Inspector
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Reviewed By:	Miller,Mark	QA Reviewer
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